Special Issue

Sensing Technology in Connected and Automated Vehicles (CAV)

Message from the Guest Editors

With the rapid advancement of intelligent transportation systems (ITSs), connected automated vehicles (CAVs) have emerged as a key solution for enhancing road safety, improving traffic efficiency, and reducing environmental impact. The seamless integration of advanced sensing technologies is fundamental to enabling CAVs to perceive, interpret, and interact with dynamic road environments. These technologies include, but are not limited to, LiDAR, radar, cameras, inertial measurement units (IMUs), vehicle-to-everything (V2X) communication, and sensor fusion techniques. This Special Issue aims to explore the latest developments in sensing technologies for CAVs, focusing on hardware advancements, perception algorithms, sensor fusion techniques, real-time data processing, and their applications in cooperative driving and decision-making. We invite original research articles, reviews, and case studies that contribute to the advancement of sensing technologies and their role in achieving safe, efficient, and intelligent autonomous mobility.

Guest Editors

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

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